

REMARKS

This is in response to the Office Action dated May 6, 2004. Claims 1-20 are pending.

Figs. 15-17 have been labeled prior art as suggested by the Examiner.

Claim 1 stands rejected under 35 U.S.C. Section 103(a) as being allegedly unpatentable over Naoyuki in view of Sawai. This Section 103(a) rejection is respectfully traversed for at least the following reasons.

Claim 1 requires "a first number of adjacent ones of the plurality of through electrodes being electrically connected to one another to form a power-supply through electrode which links the front and back surfaces of the chip and is in communication with a power supply, a second number of adjacent ones of the plurality of through hole electrodes being electrically connected to one another to form a grounding through electrode which links the front and back surfaces of the chip and is in communication with ground, and wherein only one of the plurality of through electrodes is used to form a particular signal-routing through electrode; and wherein at least one of the first number and the second number is two or greater, so that at least one of the power-supply through electrode and the grounding through electrode is made up of at least two adjacent ones of the through electrodes which are electrically connected to one another, whereas the signal-routing electrode is made up of only one of the through electrodes." Claim 1 has thus been amended in order to recite that at least one of a power-supply through electrode connected to a power supply and a grounding through electrode connected to ground (i.e.,

only one of these electrodes, or alternatively both of these electrodes) is made up of at least two adjacent ones of the through electrodes which are electrically connected to one another, whereas a signal-routing electrode is made up of only one of the through electrodes. For example, Figs. 1-2 of the instant application illustrate that each of power-supply through electrode 8a connected to a power supply and grounding through electrode 8b connected to ground is made up of at least two adjacent ones of the through electrodes 8 which are electrically connected to one another, whereas a signal-routing electrode 8c is made up of only one of the through electrodes 8 (in certain example embodiment, all through electrodes 8 have equal cross sectional area). The cited art fails to disclose or suggest this aspect of claim 1, either taken alone or in the alleged combination.

The cited art fails to disclose or suggest the aforesaid aspect of claim 1. In particular, both Naoyuki and Sawai fail to disclose or suggest that at least one of a power-supply through electrode connected to a power supply and a grounding through electrode connected to ground (i.e., only one, or alternatively both of these electrodes) is made up of at least two adjacent ones of the through electrodes which are electrically connected to one another, whereas a signal-routing electrode is made up of only one of the through electrodes. The cited art is entirely unrelated to this aspect of claim 1. Even the alleged combination (which applicant believes would be incorrect in any event) fails to meet the invention of claim 1.

Claim 6 requires that "*at least one of a power-supply through electrode connected to a power supply and a grounding through electrode connected to ground [only one or alternatively both of these electrodes] is made up of at least two adjacent ones of the through electrodes which are electrically connected to one another, whereas a signal-routing electrode is made up of only one of the through electrodes.*" The cited art fails to disclose or suggest this aspect of claim 6.

Claim 7 requires "*wherein at least one of a power-supply through electrode connected to a power supply and a grounding through electrode connected to ground [only one or alternatively both of these electrodes] is made up of at least two adjacent ones of the through electrodes which are electrically connected to one another, whereas a signal-routing electrode is made up of only one of the through electrodes.*" The cited art fails to disclose or suggest this aspect of claim 7.

Claim 8 requires "a number of adjacent connected ones of the through electrodes which are connected to a ground terminal and/or a power supply terminal of that semiconductor chip is greater than a number of adjacent connected ones of the through electrodes which are connected to a particular signal terminal thereof." Again, the cited art fails to disclose or suggest this aspect of claim 8.

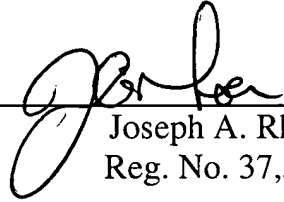
For at least the foregoing reasons, it is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

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Respectfully submitted,

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